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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|----------------|----------------------|---------------------|------------------|
| 09/695,169 | 10/24/2000 | Douglas W. Dorn | 550270.90981 | 9502 |
| 7. | 590 05/10/2002 | | | |
| John T Pienkos | | | EXAMINER | |
| Quarles & Brady LLP 411 East Wisconsin Ave | | | GONZALEZ, JULIO C | |

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ART UNIT PAPER NUMBER

DATE MAILED: 05/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | |
|---|---|------------------------------|--|--|--|
| Office Action Summary | | 09/695,169 | DORN, DOUGLAS W. | | |
| | | Examiner | Art Unit | | |
| | | Julio C. Gonzalez | 2834 | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | |
| 1) | Responsive to communication(s) filed or | າ 26 February 2002 . | | | |
| 2a)□ | | This action is non-final. | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Dispositi | on of Claims | | | | |
| - | Claim(s) 1-23 is/are pending in the application | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5)⊠ Claim(s) <u>1-14 and 16-22</u> is/are allowed. | | | | | |
| 6)⊠ Claim(s) <u>15 and 23</u> is/are rejected. | | | | | |
| · · | Claim(s) is/are objected to. | | | | |
| - | Claim(s) are subject to restriction a | and/or election requirement. | | | |
| | on Papers | and a su | | | |
| 9)⊠ The specification is objected to by the Examiner. 10)⊠ The drawing(s) filed on <u>24 October 2000</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner. | | | | | |
| 10)[| | | | | |
| 11)[\] | Applicant may not request that any objection The proposed drawing correction filed on . | | | | |
| 11/23 | | | d b) disapproved by the Examiner. | | |
| If approved, corrected drawings are required in reply to this Office action. 12)☐ The oath or declaration is objected to by the Examiner. | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | |
| 1.☐ Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | |
| Attachment(s) | | | | | |
| 2) Notic | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-94 nation Disclosure Statement(s) (PTO-1449) Paper N | 18) 5) Notice of Inform | mary (PTO-413) Paper No(s) mal Patent Application (PTO-152) | | |

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DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the wye configuration, delta configuration, dog-leg configuration, zig-zag and double delta configuration disclosed in claim 23 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

These features/configuration clearly affect in different ways the function of the invention, therefore, the configurations must be shown or the features canceled from the claims. See MPEP 608.02 (d), 608.02(e) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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2. Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 23 discloses having a generator in a wye configuration, delta configuration and single-phase configuration, yet specifications are not clear enough as to how such configurations will affect the invention characteristics (e.g. output voltage, feedback, etc). Also, the dog-leg configuration, zig-zag configuration and double delta configuration are not defined in the specifications nor in the drawings. Moreover, such configurations do not describe as to how the invention will be affected, thus it would lead to anyone with ordinary skill in the art to confusion as to how such configurations are implemented in the invention.

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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In claim 23, applicant discloses that the alternator can be configured in a single-phase configuration, dog-leg configuration, zig-zag and double delta configuration. Is it possible to show each configuration showing the connections from the alternator to the configuration and to the circuit? Wouldn't the different configurations affect the power deliver to the control system? Is the alternator functioning in a three-phase configuration? If so, how can it switch to a single-phase configuration? It seems that the specifications only show one configuration, yet the claims describe several configurations, which would make the control system to behave differently. Are the dog-leg, zig-zag and double delta configuration described in the specification in such a way as to support how such configuration would change/affect the invention? Can an alternator function just the same with any configuration?

In order to advance prosecution in the merits, the Prior Art will be applied as best understood by the examiner.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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5. Claims 15 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stacey in view of Feingold.

Stacey discloses a first calculation element 17 that receives three outputs from an alternator, a second calculation element 65, an intermediate signal generator 49, which receives a target input 61 and the first feedback signal and a control signal generator 51 that receives the intermediate signal generator signal and the second feedback signal.

Stacey discloses inherently using software since a ROM is disclosed in the invention.

However, Stacey does not disclose an inner and outer loop.

On the other hand, Feingold discloses for the purpose of reducing errors in a control system, an outer loop means SN and an inner loop means SD (see figure 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design an alternator controller as disclosed by Stacey and to modify the invention by including an outer and inner loop for the purpose of reducing errors in a control system as disclosed by Feingold.

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Response to Arguments

6. Applicant's arguments with respect to claims 15 and 23 have been considered but are moot in view of the new ground(s) of rejection.

Also, it should be emphasized that "apparatus claims must be structurally distinguishable from the prior art." MPEP 2114. In re Danly, 263 F. 2d 844, 847, 120 USPQ 528, 531 (CCPA 1959) it was held that apparatus claims must be distinguished from prior art in terms of structure rather than function. In Hewlett-Packard Co v Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990), the court held that: "Apparatus claims cover what a device is, not what it does." (emphases in original). To emphasize the point further, the court added: "An invention need not operate differently than the prior art to be patentable, but need only be different" (emphases in original).

That is, in an apparatus claim, if a prior art structure discloses all of the structural elements in the claim, as well as their relative juxtaposition, then it reads on the claim, regardless of whether or not the function for which the prior art structure was intended is the same as that of the claimed invention.

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Allowable Subject Matter

7. Claims 1-14 and 16-22 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Jcg

May 7, 2002

NESTOR RAMIREZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800